

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION VIII 999 18th STREET - SUITE 500 (8EPR-EP) DENVER, COLORADO 80202-2466

December 15, 1999

Clifford Hawkes National Park Service Denver Service Center 12795 West Alameda Parkway Lakewood, Colorado 80228

Re: Draft EIS for Winter Use Plans, Yellowstone and Grand Teton National Parks and John D. Rockefeller Jr. Memorial Parkway CEQ # 990340

Mr. Hawkes:

The U.S. Environmental Protection Agency Region VIII (EPA) has reviewed the draft environmental impact statement (DEIS) on the Yellowstone and Grand Teton National Parks and John D. Rockefeller Jr. Memorial Parkway. Our review of this project was conducted in accordance with our responsibilities under the National Environmental Policy Act (NEPA) and Section 309 of the Clean Air Act.

Our review has identified several positive steps taken by the National Park Service (NPS) toward improved environmental conditions in the project area. Specifically, EPA supports the increased protection provided to wildlife winter habitat through road- and trail-use policies that limit off-trail non-motorized or off-highway vehicles (OHV) use in these critical areas. EPA also supports implementation of emissions and noise controls on OHVs in the project area to better protect against the on-going impacts to human health, air and water quality, and the scenic and aesthetic values for which these Parks were created. However, we stress that without restrictions on the number of vehicles, any environmental gains from improved engine technology could easily be negated by increased numbers and density of vehicles.

This DEIS includes extensive analysis of the effects from current winter use and that analysis demonstrates significant environmental and human health impacts. We encourage NPS to take the steps necessary to protect human health and the environment immediately rather than to depend on future regulation of OHV engines from EPA. We would like to point out that this DEIS includes among the most thorough and substantial science base that we have seen supporting a NEPA document. While any land management decision can benefit from having *more* data available, NPS clearly has the science-based information at hand to make a decision on this Plan that will protect both human health and the natural resources in these Parks.

The remainder of our comments and recommendations on this DEIS will focus on three areas: air quality and human health effects from OHV emissions; deficiencies in the adaptive management provisions of the Plan; and compliance with Executive Order 11644.

First, EPA concludes that Alternatives A through F do not assure compliance with National Ambient Air Quality Standards (NAAQS) with respect to carbon monoxide (CO). The standard for CO is based on protection of human health. Despite data indicating existing significant impacts from CO in the Parks, this DEIS defers the decision on reducing human exposure to high CO levels in the Parks through "adaptive management" and through OHV emission controls that would not take effect until at least 2008. The NPS has available management tools that could address these impacts through *this* action including limiting numbers and density of OHVs in the Parks, and it is not clear why these or other measures are not being proposed in the preferred alternative.

Section 169(A)(a)(1) of the Clean Air Act (The Act) states that "Congress hereby declares as a national goal the prevention of any future, and the remedying of any existing, impairment of visibility in mandatory Class I Federal areas which impairment results from manmade air pollution." This DEIS describes man-made impairments to both air quality and visibility from winter use in the project area. The Act specifically delegates the responsibility to protect air quality and related values (visibility, odor) in Class I areas to the Federal Land Manager. The decision for this Management Plan *must* therefore be protective of Class I air quality and visibility standards and values.

Second, the adaptive management procedures included in Alternatives B and E are not well defined in this DEIS. EPA has included in the enclosed "Specific Comments" our detailed concerns and recommendations regarding the description and application of adaptive management for this action. We are concerned that the adaptive management process described in this action could unnecessarily result in the need for additional, costly NEPA processes and delayed environmental protection.

Finally, as referenced in the Purpose and Need for this action, Executive Order 11644 (as amended) states that off-road vehicles shall be permitted in National Parks "only if...that off-road vehicle use will not adversely affect natural, aesthetic, or scenic values." EPA has reviewed this DEIS in detail, and concludes that the analysis provided clearly and convincingly demonstrates current snowmobile use is indeed adversely affecting the natural (wildlife, air quality), aesthetic (noise), and scenic (visibility) values in these Parks. Further, Alternatives A through F presented in this document would result in continued adverse impacts to these resources from off-road vehicles. The DEIS specifically addresses resource impacts from the Alternatives A through F as "adverse" and "compromised." Ten of the eleven management prescriptions listed in Table 2 indicate that "visitor use may compromise resource values." The summary of effects in Table 4 indicate varying levels of "adverse" effects for each alternative with respect to public health, public safety, water quality, air quality, and wildlife. It is evident that Alternatives A through F in this DEIS would not comply with Executive Order 11644. E.O. 11644 therefore requires the NPS to restrict OHV use in these areas immediately to protect human health and Park resources.

Based on impacts to human health, air quality, water quality and visibility, EPA has identified Alternative G as the "environmentally preferred alternative." Alternative G could easily be improved to be more protective of winter wildlife habitat by including the "areas of designated use" from Alternatives B, D and E.

Based primarily on the likelihood that this action will result in noncompliance with air quality standards and that air quality could negatively impact human health, EPA is rating the Draft EIS for Winter Use Plans, Yellowstone and Grand Teton National Parks and John D. Rockefeller Jr. Memorial Parkway as EO - 2 (Environmental Objections, Insufficient Information). "EO" indicates that the EPA review has identified environmental impacts including possible violation of environmental regulations that can and should be avoided in order to fully protect the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of additional project alternatives. The identified additional information, data, analyses or discussion should be included in the Final EIS (FEIS). A full description of EPA's EIS rating system is enclosed.

Because this action has the potential to exceed NAAQS, it is essential that EPA and NPS take steps to work together to assure that air quality and human health are protected in the near term and beyond through this project. We offer to meet with you and your staff to work these issues out between now and the publication of the FEIS. We appreciate the opportunity to review this project and provide comments. Thank you for your willingness to consider our comments at this stage of the process, and we hope they will be useful to you. Should you have any questions regarding these comments, you may contact Phil Strobel of my staff at (303) 312-6704.

Sincerely,

Original Signed by Cynthia G. Cody

Cynthia G. Cody, Chief NEPA Unit

Enclosures

cc: Elaine Suriano, EPA Office of Federal Activities

Specific Comments from the US Environmental Protection Agency (EPA) on the Winter Use Plans for Yellowstone, Grand Teton and J.D. Rockefeller Jr. Parkway DEIS

Air Quality

EPA is pleased that the NPS has recognized the air pollution problems occurring inside its National Parks. However, EPA is concerned that this Draft EIS contains alternatives which would continue to result in ambient levels of carbon monoxide that may exceed both the National Ambient Air Quality Standards and the State of Wyoming air quality standards. As stated on page 108 under Regulatory Overview, "The Act (Clean Air Act) gives Federal land managers the responsibility for protecting air quality and related values, including visibility, ..., and visitor health from adverse air pollution impacts."

Section 169(A)(a)(1) of the Clean Air Act states that "Congress hereby declares as a national goal the prevention of any future, and the remedying of any existing, impairment of visibility in mandatory Class I Federal areas which impairment results from manmade air pollution." In Appendix H under Air Quality Issues, the DEIS states "Some winter visibility effects have been reported in Yellowstone National Park, where snowmobile emissions resulting in a blue haze have been observed along the West Yellowstone - Old Faithful corridor." This visibility impairment and high levels of carbon monoxide are occurring inside the project area where the Federal Land Manager has a delegated authority under the Clean Air Act to protect air quality and related values.

Because proposed OHV emission reductions would take place no sooner than 2008, and because this EIS does not provide for limitation on the number of OHVs in the Parks, Alternatives A through F would not assure compliance with NAAQS. While the preferred alternative (B) will clearly and permanently improve air quality and visibility in the West Yellowstone to Old Faithful corridor, the management plan does not provide any assurance that the air quality problems in the remainder of the project area will improve. EPA encourages the NPS to consider in the development of this document, only those alternatives that would result in air quality that not only meets the NAAQS and visibility goals of the Clean Air Act, but also achieves a safety margin to ensure that these standards and goals are not exceeded.

Monitoring for nitrogen oxides (NOx) was not addressed in the DEIS. Given existing data on vehicle emissions and on visitor use, it should be possible to determine the levels of NOx likely to occur in these Parks. The Final EIS (FEIS) should include a NOx estimate (hourly, daily, and annual) and disclose how this level compares with the PSD Class I standard of 0.05 ppm for NOx.

The DEIS (pages 95, 108, and Appendix H) is not clear in describing where CO measurements were obtained and whether or not they meet certain siting criteria. Page 95 states that violation of NAAQS did not appear to occur, whereas Appendix H states that the Yellowstone's West Entrance CO monitoring meets or exceeds all applicable Clean Air Act criteria for micro-scale monitoring. We recommend that Table 14 on page 108 include a summary of ambient air monitoring results for Yellowstone National Park for a direct comparison to Federal air quality standards.

The DEIS (page 177, Effects on Public Health) states, "If 2-stroke engine technology remains unchanged the impacts under this alternative will be adverse, and range from negligible to moderate depending on location." EPA is scheduled to propose emissions standards for OHVs late in 2000. A final decision on the standards is scheduled late in 2001. Should those standards be approved, it would be some numbers of years before OHV manufactures would be required to implemented the improvements. Again, it would be years after improved machines begin coming off the manufacturing lines before enough fleet turnover would occur to the realize expected environmental benefits. Given the impacts identified from current OHV emissions in the Parks, it is unacceptable to wait 10 or more years to reduce or eliminate the impacts.

Adaptive Management

Alternatives B and E are built upon a concept described as "adaptive management." Our review has identified several potential improvements in the adaptive process outlined in this document. In instances where the responsible agency can lay out thresholds and decision trees to guide future decisions, EPA supports the use of adaptive management. Without such thresholds and management options, adaptive management is not substantially different from traditional management. At its most powerful, adaptive management identifies future management *actions*, rather than management *processes*. True adaptive management can reduce the need for future NEPA actions, or at least reduce the scope of future NEPA decisions. We offer several specific suggestions with respect to adaptive management that should be included in the FEIS:

- 1) NPS should include threshold values that would be protective of air quality, visibility, aesthetics (noise), water quality, and wildlife impacts. These thresholds would represent the minimum desired conditions in the Parks. These thresholds would be the "trigger points" that would determine when additional management decisions (potentially including NEPA) are necessary. We believe that these thresholds can be set in this EIS based on existing information and the expertise of NPS science and management staff, and that there is no reason to defer the disclosure of threshold values to some later date. The only threshold that may prove difficult to determine due to lack of study might be "visitor experience."
- 2) Ideally, this management plan would not only identify the thresholds, but would also discuss and identify management alternatives and mitigation that would be implemented should a threshold be exceeded. Inclusion of thresholds and management alternatives in this EIS would reduce or eliminate the need for additional NEPA on this issue in the near future.
- 3) The FEIS should provide assurance that funding is available for the adaptive process including NEPA if needed.
- 4) The FEIS should include more detail on the proposed adaptive management process including the mechanisms for public disclosure of the analysis and the decisions. The roles of the NPS, other Agencies, independent science, and the public should be clearly stated. The FEIS should discuss the future decision points in this adaptive process that would require NEPA.





The first bullet in the "Actions and Assumptions Common to all Alternatives" (p. 25) indicates that "visitor use capacities" are to be determined under each Alternative in this EIS. It appears, however, that determination of visitor capacity is not actually an action under *this* EIS but would be included as part of the adaptive management scenario; possibly under a future NEPA process. It is important that the determination of visitor use capacities be made by NPS, and be based on the best available science.

Water Quality

In our scoping comments, EPA expressed concern about water quality impacts from the deposition of OHV emission pollutants to the snow pack in the Parks. The DEIS identifies those potential impacts and indicates on-going monitoring to assure that pollutants are not adversely impacting natural resources in the Parks. EPA would like to suggests two specific areas of needed research in addition to those studies identified in the DEIS. First, because wetlands can act as sinks for non-point source pollutants, we recommend water quality and soil monitoring in wetlands adjacent to OHV corridors. Second, because amphibians are among the most sensitive receptors of pollution, we recommend study of amphibian populations, comparing OHV corridor area populations to populations in other areas of the Parks.

